

1 TITLE: PEACH TREE NAMED: 'SWEET HENRY'

2 NAMES AND ADDRESSES OF INVENTORS:

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9 CITIZENSHIP: All inventors are citizens of the United States
10 of America.

11 BACKGROUND OF THE VARIETY:

12 FIELD OF THE INVENTION

13 In the field of plant genetics, we conduct an extensive
14 and continuing plant-breeding program including the
15 organization and asexual reproduction of orchard trees, and
16 of which plums, peaches, nectarines, apricots, cherries and
17 interspecifics are exemplary. It was against this background
18 of our activities that the present variety of peach tree was
19 originated and asexually reproduced by us in our experimental
20 orchard located near Modesto, Stanislaus County, California.

21 PRIOR VARIETIES: Among the existing varieties of peach and
22 nectarine trees, which are known to us, and mentioned herein,
23 'Amparo' Peach (U.S. Plant Patent #6472), 'O'Henry' Peach
24 (U.S. Plant Patent #2964), 'June Lady' Peach (U.S. Plant
25 Patent #3022) and 'May Grand' Nectarine (U.S. Plant Patent
26 #2794).

27 STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND

28 DEVELOPMENT: Not applicable.

1 ORIGIN OF THE VARIETY: The new variety of peach tree (*Prunus*
2 *persica*) was originated by us in our experimental orchard
3 located near Modesto, California as an open pollinated
4 seedling (pollen parent unknown) from seed collected from our
5 proprietary parent labeled 226LK410. The proprietary
6 seedling (226LK410) originated as the second filial
7 generation seedling from the crosses of the following peaches
8 and nectarine. The maternal parent was developed from the
9 cross of a peach of unknown parentage with 'Amparo' Peach
10 (U.S. Plant Patent #6472). The pollen parent was developed
11 from the crosses of the following varieties, 'O'Henry' Peach
12 (U.S. Plant Patent #2964), 'June Lady' Peach (U.S. Plant
13 Patent #3022) and 'May Grand' Nectarine (U.S. Plant Patent
14 #2794). We planted and maintained a large group of these
15 open pollinated seedlings on their own root system. Under
16 close and careful evaluation we recognized the desirable tree
17 and fruit characteristics of the present late maturing
18 variety and selected it for asexual propagation and
19 commercialization.

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21 ASEXUAL REPRODUCTION OF THE VARIETY: Asexual reproduction of
22 the new and distinct variety of peach tree was by budding to
23 'Nemaguard' Rootstock (non-patented), as performed by us in
24 our experimental orchard located near Modesto, California,
25 and shows that reproductions run true to the original tree
26 and all characteristics of the tree and its fruit are
27 established and transmitted through succeeding asexual
28 propagations.

1 SUMMARY OF THE NEW VARIETY: The new variety of peach tree is
2 of large size, vigorous, upright growth and a productive and
3 regular bearer of large, firm, yellow flesh, clingstone
4 fruit, having a mild, sweet, sub-acid flavor with excellent
5 eating quality. The fruit is further characterized by having
6 an attractive red skin color, being uniform in size
7 throughout the tree and having the ability to hold firm on
8 the tree 8 to 10 days after maturity (shipping ripe). In
9 comparison to its parent 'Amparo' Peach (U.S. Plant Patent
10 #6472) the fruit is larger in size and has a higher degree of
11 attractive skin color and is approximately 50 days later in
12 maturity, and in comparison to 'O'Henry' Peach (U.S. Plant
13 Patent #2964) the fruit of the new variety ripens
14 approximately 7 days later with a higher degree of attractive
15 red skin color.

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17 PHOTOGRAPH OF THE VARIETY: The accompanying color
18 photographic illustration shows typical specimens of the
19 foliage and fruit of the present new peach variety. The
20 illustration shows the upper and lower surface of the leaves,
21 an exterior and sectional view of a fruit divided in its
22 suture plane to show flesh color, pit cavity and the stone
23 remaining in place. The photographic illustration was taken
24 shortly after being picked (shipping ripe) and the colors are
25 as nearly true as is reasonably possible in a color
26 representation of this type.
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DESCRIPTION OF THE VARIETY: The following is a detailed botanical description of the new variety of peach tree, its flowers, foliage and fruit, as based on observations of 5 year old specimens grown near Modesto, California, with color in accordance with Munsell Book of Color.

TREE

Size:

Large, normal for peach trees.
Pruned to 3 to 3.5 meters in height at maturity.

Vigor:

Vigorous.
Tree growth 1.5 to 2 meters in height the first growing season, varies with fertility, type of soil and cultural practices.

Form:

Upright, usually pruned to vase shape.

Productivity:

Productive.
Normal fruit thinning and spacing necessary.
Number of fruit set per tree varies with climatic conditions during blooming period.

Bearer:

Regular.
Adequate fruit set for 3 consecutive years.
No alternate bearing observed.

Fertility:

Self fertile.

Density:

Medium dense.
Pruning to vase shape is desirable to enhance fruit color and keep fruit wood healthy.

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Hardiness:

Hardy in all stone fruit
growing areas of California.
Winter chilling requirement
approximately 750 hours at
or below 45°F.

TRUNK

Size:

Large, stocky.
Average circumference 49.5 cm
at 22.8 cm above ground on a
5 year old tree.

Texture:

Medium shaggy, becoming rougher
with age.

Color:

Varies from 5Y 8/1 to 5Y 7/1.

BRANCHES

Size:

Medium.
Average circumference 18.7 cm
at 1.2 meters above the
ground.

Surface Texture:

New growth smooth, varies to
medium rough with age.

Lenticels:

Average number; 49 in a 25.8
square cm section.
Average length 2.7 mm.
Average width 1.3 mm.
Color varies from 7.5YR 6/8 to
7.5YR 5/8.

Color:

New growth varies from 7.5Y 5/6
to 10Y 5/8. Old growth
varies from 5YR 4/4 to 7.5YR
3/4, becoming darker with
age.

LEAVES

Size:

Medium to large.

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Average length 129.8 mm.
Average width 35.1 mm.

Form: Lanceolate.

Apex: Acuminate.

Base: Cuneate.

Margin: Crenate.

Thickness: Medium.

Surface Texture:
Upper surface relatively smooth, slightly indented over midrib and leaf veins, glabrous.
Lower surface relatively smooth, small ridges created by midrib and pinnate venation, glabrous.

Petiole:
Average length 12.0 mm.
Average width 1.5 mm.
Color varies from 7.5Y 6/6 to 7.5Y 5/6.
Grooved longitudinally.
Glabrous.

Glands:
Reniform.
Size - small.
Average length 0.6 mm.
Average diameter 0.5 mm.
Number varies from one to three, average number two.
Located on base of the leaf blade and upper portion of the petiole.
Color varies from 7.5Y 4/6 to 7.5Y 5/6.

Color:
Upper surface varies from 5GY 4/4 to 5GY 3/6.
Lower surface varies from 5GY 5/4 to 5GY 4/4.
Midvein color varies from 7.5Y 6/6 to 7.5Y 6/4.

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FLOWER BUDS

Size:
Large.
Average length 18.5 mm.
Average diameter 11.5 mm.

Hardiness:
Hardy in all stone fruit
growing areas of California.

Form:
Conical.

Pedicel:
Size - medium.
Average length 4.0 mm.
Average width 1.5 mm.
Color - varies from 2.5GY 6/8
to 5GY 5/8.

Color:
Varies from 7.5RP 6/10 to 7.5RP
8/6.

FLOWERS

Size:
Large, showy.
Average height 21.9 mm.
Average diameter 42.3 mm.

Petals:
Very large.
Average length 21.2 mm.
Average width 20.1 mm.
Number 5, alternately arranged
to sepals.
Form - orbicular.
Margin - sinuate, slightly
cupped.
Both upper and lower surfaces
glabrous.
Color varies from 5RP 7/8 to
5RP 8/6.

Sepals:
Number - 5, alternately
arranged to petals.
Shape - triangular.
Size - large.
Average length 6.6 mm.
Average width 4.0 mm.
Color - upper surface varies
from 5GY 5/8 to 5GY 4/6,

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glabrous. Lower surface
varies from 5GY 6/6 to 5YR
3/2, pubescent.

Stamens:

Average number per flower 46.
Average filament length 17.5
mm.
Filament color varies from 5RP
9/2 to 5RP 5/8.
Anther color varies from 5R
3/10 to 7.5R 3/10.

Pollen:

Abundant, self fertile.
Color varies from 2.5Y 7/10 to
2.5Y 8/12.

Pistil:

Normally one.
Surface - pubescent.
Average length 17.3 mm,
compared to stamens,
approximately same height.
Color varies from 10Y 8/6 to
10Y 8.5/4.

Fragrance:

Wanting.

Blooming Period:

Date of First Bloom
February 25, 2003.
Date of Petal Fall
March 6, 2003.
Varies slightly with climatic
conditions.

Color:

Varies from 5RP 8/6 to 7RP 8/6,
varies slightly with age of
flower.

Number Flowers per Flower Bud:

One.

Pedicel:

Medium.
Average length 5.0 mm.
Average width 1.7 mm.
Color varies from 10Y 5/8 to
2.5GY 5/6.

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FRUIT

Maturity When Described:

Firm ripe.

Date of First Picking:

August 11, 2003.

Date of Last Picking:

August 18, 2003.

Varies slightly with climatic conditions.

Size:

Large.

Average diameter axially 76.7 mm.

Average transversely in suture plane 78.0 mm.

Average weight 275.5 grams.

Average weight varies slightly with fertility of the soil, amount of thinning and climatic conditions.

Form:

Globose.

Suture:

Shallow, extends from base to apex.

Ventral Surface:

Nearly smooth, very slightly lipped.

Apex:

Varies from rounded to very slight tip.

Base:

Slightly retuse.

Cavity:

Round to slightly elongated in suture plane.

Average depth 9.0 mm.

Average diameter 19.1 mm.

STEM

Size:

Medium.

Average length 9.4 mm.

Average diameter 4.0 mm.

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FLESH

Color: Varies from 10Y 7/6 to 2.5GY 7/6.

Ripens: Evenly.

Texture: Firm, meaty.

Fibers: Few, small and tender.

Aroma: Slight.

Amydgalin: Undetected.

Eating Quality: Excellent.

Flavor: Excellent, mild, sweet, sub-acid.

Juice: Moderate amount, enhances flavor.

Brix: Average Brix 12.0°, varies slightly with amount of fruit per tree and climatic conditions.

Color: Yellow, varies from 2.5Y 8/10 to 2.5Y 8.5/10.
Pit cavity varies from 7.5R 2/6 to 7.5R 3/10. Slight bleeding from pit cavity into flesh.

SKIN

Thickness: Medium.

Surface: Smooth.

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Down: Moderate amount, short in length.

Tendency to Crack: None.

Color: Ground color varies from 2.5Y 8.5/8 to 2.5Y 8/8. Nearly overspread with 7.5R 4/8 to 10R 3/6.

Tenacity: Tenacious to flesh.

Astringency: None.

STONE

Type: Clingstone.

Size: Large.
Average length 32.5 mm.
Average width 30.2 mm.
Average thickness 19.0 mm.

Form: Obovoid.

Base: Flat to slightly rounded.

Apex: Pointed.
Average length 1.2 mm.

Surface: Irregularly furrowed toward apex, pitted toward base. Pit cavities vary from round to elongated. Ridges slightly narrow with rough edges.

Sides: Unequal, with one side slightly larger, extending further from suture plane.

Tendency to Split: Very slight.

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Color: Varies from 10R 3/4 to 2.5YR 3/4 when dry.

KERNAL

Form: Ovate.

Taste: Bitter.

Viability: Viable, embryo developed.

Size: Medium.
Average length 18.3 mm.
Average width 11.5 mm.
Average depth 5.1 mm.

Skin: Color varies from 5YR 4/6 to 5YR 4/8 when dry.

USE

Dessert.
Market - local and long distance.

KEEPING QUALITY

Good, held firm in cold storage at 38° to 42°F for 21 days without internal breakdown or appreciable loss of flavor.

SHIPPING QUALITY

Minimal skin scarring or bruising of flesh during picking and packing trials.

PLANT/FRUIT DISEASE RESISTANCE/SUSCEPTIBILITY

No specific testing for relative plant/fruit disease resistance/susceptibility has been designed. Under close observation during planting, growing and harvesting of fruit, under normal cultural and growing conditions near Modesto, California, no particular

1 plant/fruit disease
2 resistance of susceptibility
3 has been observed. Any
4 variety observed during
5 indexing of plant
6 characteristics with
7 abnormal fungus, bacterial,
8 virus or insect
9 susceptibility is destroyed
10 and eliminated from our
11 breeding program.

8 The present new variety of peach tree, its flowers,
9 foliage and fruit herein described may vary in slight detail
10 due to climate, soil conditions and cultural practices under
11 which the variety may be grown. The present description is
12 that of the variety grown under the ecological conditions
13 prevailing near Modesto, California.
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